CIHM
Microfiche
Series
(Monographs)

ICMH
Collection de
microfiches
(monographies)

Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1992

A
971.613

REPORT

ON AFFAIRS OF THE

MERIGOMISH

Coal Mining Company.

PHILOMATHESIAN CLUB
LIBRARY.
No. 194

HALIFAX, N. S.:
MACNAB & SHAFFNER, PRINTERS, 11 PRINCE STREET.
1866.

Report.

My attention having been directed at the request of L. R. Kirby, Esq., to two areas of 5 square miles each under license to him (Nos. 1 and 2 on the accompanying plan), I have embodied the results of my observations in the following brief remarks.

On area No. 1, the southern half alone can be considered valuable, as the northwest portion consists of Strata lying below the productive coal beds.

A license to work on the area No. 1 of one square mile can be so laid out as to comprise several workable seams of Coal, one of which is five feet in thickness, and formerly worked by one John McKay. But little Coal was extracted owing to the want of means of the owner to sink a shaft and put up the requisite works. I examined this seam, and also some of the Coal taken from it. It appears to be of very good quality, and well adapted for domestic and forge purposes. Persons residing in New Glasgow who have used it speak well of its quality.

That the McKay seam, as also all the others in the locality, thicken as they descend, and improve in qua-

lity is beyond dispute. By measurement the rate of increase of thickening here is one inch in 4 feet.

The cropping of three other seams also shew, and these run into and under area No. 1.

The existence of Oil Coal on this area can be relied on, but no test of its quality has yet, I believe, been made. The large seams of the Albion mines should pass into part of this area but have not as yet been discovered.

Coal here can be mined at a distance of about 1¼ miles from the Pictou extension line at New Glasgow, and carried to that place by a tram road at an easy grade, and thence on the Pictou line to the place of loading on the East River. The expense of the tramway would not exceed $3,000 per mile, (including light T rails,) there being little cutting or filling required.

I do not consider any locomotive engine would be required as the cars can be worked by their own gravity in their descent, and returned to the pit either by horses or wire rope in connection with a small stationary engine similar to the long incline used at the Mining Association's works, Sidney.

It is on Area No. 2 that the largest amount of Coal can be relied upon. Here two square miles of surface will give five (if not more) workable seams. One of these, the Barton seam, found on the area of R. G. Haliburton, Esq., is 10 feet in thickness, another, the McBean seam, near widow McLane's house, is 7 feet in thickness, and probably more, as two feet only of the lower bench of coal

were gone through in the opening made on it. This may probably be one of the large seams wrought by the Mining Association at the Albion mines.

The McKay seam worked by George McKay is 4 ft. 3 in thickness in the Lindsay Pit, and 5 ft. 3 in. where bored through on area No. 2, it is overlaid 60 ft. vertically by another seam of 3 ft. 2 in. both of which seams can be worked by one set of Pits, and thus being equal to a seam 8 ft. 5 in.

The rich Oil Coal of the George McKay area 6 ft. in thickness will also be found on No. 2. This Oil Coal at the surface has, I am informed, yielded 62 gallons of crude Oil per ton, and from my own knowledge of it, I do not think this amount over estimated. From the course of strike and other surface indications I consider area No. 2 will contain all the known seams of the district, and should yield seams containing in their aggregate a thickness of 73 feet.

Assuming the entire two miles to be selected to contain at the least two thirds of the above quantity in thickness over their whole extent, a total of upwards of 48 millions of tons is shewn. In this calculation the amount required for support of roof, &c., has been deducted. Of course on such an estimate a large deduction must also be made for accidental loss of workings. But even ducting $\frac{1}{4}$ of the amount mentioned a quantity remains that renders this one of the most valuable properties in the Province.

As to the facilities for shipment from this area a glance

at the plan will shew that Merigomish Harbour, on which the eastern part of the area No. 2 abuts, is by its sheltered position, depth and extent, well adapted for the accommodation of all the shipping required for the export of the Coal raised. Vessels of over 1000 tons have frequently entered it for the purpose of loading with timber. Owing to the close proximity of Pictou Harbor, however, vessels invariably use that as a shelter.

On examining Capt. Bayfield's Chart of Merigomish, published in 1842, I find the depth of water ranging from 35 feet at the entrance to 9 feet in Big Gut. I had soundings taken through the ice at low tide from Cameron's Point to Munroe Head and find an average of 12 feet of water in a nearly straight channel, the minimum of depth being 10 feet with a black mud bottom, into which a searching rod can be driven by hand 10 and 12 feet.

To accommodate vessels of a large class some dredging will be necessary, the bottom being soft mud, the cost should not exceed 20 cents per cube yard. About 1,600 yards will be the maximum required to allow vessels drawing 15 and 16 ft. to proceed to Cameron's Point, that being the nearest spot to the probable site of the permanent Pits and Works. A line of valley extends from thence through area No. 2 by which a line of Railway not exceeding one mile will connect the very heart of the workings with the place of shipment. No natural obstacles exist to render the construction of a line of Railway either difficult or expensive.

A wharf of piles 150 feet in length will give ample depth for loading.

In conclusion I would recommend a careful selection of ground on Areas No. 1 and 2, and a judicious course of exploration to be carried on during the coming summer to determine fully the extent, number and direction of strike of the various seams before the opening of any permanent pits or establishment of the works on the mine.

If the line of railway be determined on, grading may at once be commenced, and the building of the wharf undertaken, as under favorable circumstances several cargoes may be shipped before the ensuing winter, by which the quality of the Coal will be established.

I have not as yet seen any analysis of either the McBean, Barton or McKay seams, but from an examination of Coal from each of these I judge them to be of very good quality, free from injurious earthy admixtures, and no doubt excellent steam and Gas Coals. The established character of all the Coals from the Albion mines district is so well known that nothing need be said on the subject. Reference to assays made by Mr. Dawson and Professor Johnson may be seen in the "Acadia Geology," page 260, and a more recent analysis of Coal from the "French" seam by Prof. B. Silliman in the prospectus of the Nova Scotia Coal Company.

WM. BARNES,
Mining Engineer.

HALIFAX, N. S., March 15, 1866.